Chapter 10 Shock

Shock

- Shock: Inadequate _______________________
- State of collapse and failure of the _______________________ system
- Leads to inadequate circulation
- Without adequate blood flow, _______________________ cannot get rid of metabolic wastes
- Results in hypoperfusion to cells that causes the organ, then organ systems, to fail

Shock

- Shock can occur because of medical or _______________________ events:
  - Heart attack
  - Severe _______________________ reaction
  - Automobile crash, GSW, other major _______________________
10 Pump Failure Causes of Shock

11 Cardiogenic Shock
- Inadequate function of the heart or pump failure
- Causes a backup of blood into the lungs
- Results in pulmonary edema
- Pulmonary edema leads to impaired oxygenation

12 Obstructive Shock
- Obstructive shock occurs when conditions that cause obstruction of the cardiac muscle also affect the pump function
- Common examples include cardiac tamponade and pneumothorax
- These conditions discussed later in course

13 Distributive Causes of Shock

14 Distributive Shock
- Results when there is widespread relaxation of the small arterioles, small venules, or both
- Blood volume "shocks" and perfusion decreases
- Septic shock, neurogenic shock, anaphylactic shock, and psychogenic shock

15 Septic Shock
- Results from combined vessel and content failure
- Some patients with severe bacterial infections, toxins, or infected tissues contract septic shock
- Toxins damage vessel walls, causing leakage and impairing ability to contract
- Leads to dilatation of vessels and loss of plasma, causing shock

16 Neurogenic Shock
- Poor autonomic function
- Damage to the spinal spine may affect control of the size and muscular tone of blood vessels
- The vascular system increases
- Blood in the body cannot fill the circulatory system

17 Perfusion and Neurogenic Shock

18 Anaphylactic Shock (1 of 2)
- Severe allergic Reaction
- Occurs when a person reacts violently to a substance to which he or she has been sensitized
- Sensitization means becoming sensitive to a substance that did not initially cause a reaction

19 Anaphylactic Shock (2 of 2)
• Each subsequent exposure tends to produce a more __________________ reaction.
• Four categories of common causes:
  - __________________
  - Stings
  - Ingestion
  - __________________

20 □ Psychogenic Shock
• Caused by sudden reaction of the nervous system that produces a ___________________, generalized vascular dilation
• Commonly referred to as fainting or __________________________
• Can be brought on by serious causes: irregular heartbeat, brain aneurysm
• Can be brought on by causes ranging from __________________________ or bad news to unpleasant sights

21 □ Low Fluid Volume Shock

22 □ Hypovolemic Shock (1 of 2)
• Content failure
• Results from fluid or blood loss
  • __________________ Shock is loss of blood
  • _________________________ shock is loss of body fluids such as diarrhea and vomiting
• Blood is lost through external and internal bleeding.
• Severe thermal ______________________ cause plasma loss.

23 □ Hypovolemic Shock (2 of 2)
• __________________ can cause or aggravate shock.
• Very young and ______________________ are most susceptible to dehydration
• Dehydration can lead to hypovolemic shock and can lead to death

24 □ Respiratory Insufficiency

25 □ Respiratory Insufficiency
• AKA ______________________ Shock
• Patient with a severe chest injury or airway ______________________ may be unable to breathe adequate amounts of oxygen.
• Insufficient oxygen in the blood will produce shock.
• Multiple ______________________ causes

26 □ Progression of Shock
• ______________________ shock
  • When the body compensates for blood loss
• ______________________ shock
  • The late stage of shock when blood pressure is falling and the body cannot compensate
• ______________________ shock
• The terminal stage that results in death

27 S/S of Compensated Shock
• _______________________
  • Anxiety
  • Restlessness
  • Feeling of impending doom
  • Altered mental status
  • ________________ pulse
  • ________________ skin

28 S/S of Decompensated Shock
• Falling blood pressure (systolic <__________mmHg in adults)
• Labored, irregular breathing
• Ashen, ________________, cyanotic skin
• Thready or absent pulse
• ________________ eyes, dilated pupils
• Poor ________________ output

29 S/S of Irreversible Shock
• This is the ________________ stage of shock.
• A ________________ of any type will not be enough to save a patient’s life.

30 When to Expect Shock
• Multiple severe _______________________
• Abdominal or chest injuries
• Spinal injuries
• Severe _______________________
• Major heart attack
• _______________________

31 General Emergency Care (1 of 2)
• Make certain patient has open _______________________.
• Keep patient _______________________.
• Control external _______________________.
• Splint any broken bones or joint injuries.

32 General Emergency Care (2 of 2)
• Always provide _______________________.
• Splint any broken bones or joint injuries
• Place ______________________ under and over patient.
• If there are no broken bones, elevate the legs __________” to __________”.
• Do not give the patient anything by mouth.

33 Treating Cardiogenic Shock
• Patient may breathe better in a sitting or _______________________ -sitting position.
• Administer high-flow ____________________.
• Assist ventilations as necessary.
• Have ____________________ nearby in case the patient vomits.
• Transport promptly.

34Treating Obstructive Shock
• Tension pneumothorax and cardiac tamponade both require ____________________ procedures
• Tension pneumothorax can be treated by a ____________________
• Cardiac Tamponade must be treated by a ____________________
• ABC’s and rapid transport

35Treating Septic Shock
• Transport as promptly as possible while giving all ____________________ support available.
• Definitive treatment requires complex hospital management including ____________________
• Give high-flow oxygen during transport.
• Use ____________________ to conserve body heat.

36Treating Neurogenic Shock
• Maintain airway and ____________________ breathing as needed.
• Keep patient warm.
• ____________________ promptly.
• Neurogenic shock victims will have skin that is warm and ____________________

37Treating Anaphylactic Shock
• Administer ____________________ if indicated
• Provide prompt transport
• Provide all possible support
  • ____________________
  • ____________________ assistance

38Treating Psychogenic Shock
• It is usually self-______________________ .
• Assess patient for ____________________ from fall.
• If patient has difficulties after regaining consciousness, suspect another ____________________.

39Treating Hypovolemic Shock
• Control obvious ____________________ .
  • ____________________ any bone or joint injuries.
• If no fractures, raise legs 6” to 12”.
• Secure and maintain ____________________ .
• Give oxygen as soon as you suspect shock.
- Transport rapidly.

40 Treating Respiratory Shock
- Secure and support the airway.
- Clear airway of any ________________________ .
- Ventilate if needed with a ________________________ device.
- Administer ________________________ .
- Transport promptly.

41 Key Points to Remember
- Agitation, restlessness, and anxiety are normally the ________________________ signs of shock.
- A falling BP is a ________________________ sign of shock.
- Some types of shock has no ________________________ loss.
- Not all shock produces ________________________ and rapid heart rate (ex: Neurogenic Shock).